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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/821,076
Filing Date: April 08, 2004
Appellant(s): TATAVU ET AL.

TATAVU ET AL.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed August 12, 2009 appealing from the Office action mailed November 07, 2008 and April 14, 2009.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,311,192	Rosenthal et al.	10-2001
2002/0091533	Ims et al.	07-2002
6,272,472	Danneels et al.	08-2001
2002/0161859	Willcox et al.	10-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 7-12 are rejected under 35 U.S.C. 101 because claims 7-12 describe a computer system with subject means to carry out various functions. All the subject means can be reasonably interpreted as software. Software application is a nonstatutory subject matter under 35 U.S.C. 101.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-9 and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosenthal et al.

As to claim 1, Rosenthal et al. disclose claimed invention including a method for binding of a workflow engine to a data model containing data objects associated with a plurality of resources (Fig 1, workflow engine bind to data model i.e. database, personal development, and personal administration), for a workflow request having a first

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message type in a computer system (Col. 9 line 21-25; Col 9 lines 24-47), said method comprising the steps of:

updating said workflow request with pre-process workflow data (Col. 9 lines 21-25; Col. 8 lines 60-65);

transforming said updated workflow request from first message type to a second message type supported by said workflow engine (Col 9 lines 37-47; Col. 9 lines, 59-62);

processing said updated workflow request to update said plurality of resources in said computer system (col. 10 lines 20-37; col. 10 lines 48-51); and,

updating said data objects of said data model associated with updated said plurality of resources (Col 13 lines 20-23).

Regarding claim 2, see the discussion in claim 1. Rosenthal et al. further disclose that the step of updating said workflow request comprises:

determining a plurality of request types associated with said workflow request (Col. 9 lines 34-47); and

resolving said plurality of request types based on said data objects of said data model (Table 1).

Concerning claim 3, see the discussion in claim 2. Rosenthal et al. further disclose that wherein said step of resolving comprises:

matching logical operations associated with said plurality of request types with corresponding said data objects identified in said data model (Table 1); and,

substituting corresponding said data objects representative of said pre-process workflow data into said workflow request (Col. 9 line 60 - col. 10 line 11, table 1, and [col. 10 lines 48-55, and fig 7]).

As to claim 5, see the discussion in claim 1 above. Rosenthal et al. further disclose that said updated workflow request further comprises a workflow engine (Col 9, lines 59-61, and Fig 1).

Regarding claim 6, see the discussion in claim 5 above. Rosenthal et al. further disclose that the step of updating said data model further comprises:

sending outcome data in notification of said workflow processed from said workflow engine to a post workflow interceptor (Col 10 lines 48-57, Col. 9 line 37-47, and fig. 8);

matching said outcome data in said notification with corresponding data objects in said data model by said post-workflow interceptor (Col 9 lines 24-47, and Table 1);
and

updating of said data objects in said data model with said outcome data by said post-workflow interceptor to synchronize said data model with said plurality of resources of said computer system (Col.13 lines 7-23, and Col. 10 lines 58 – col. 11 lines 3, figure 7, table 1).

With respect to claim 7, Rosenthal et al. anticipated the claimed invention. All the limitations of claim 7 are of the same scope as the limitations of claim 1, and are therefore rejected on the same basis, with following noted exceptions. Claim 7 recites a first updating means, a transforming means, a processing means, and a second

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updating means. Rosenthal et al. disclose a supplemental routine module, equivalent to transforming means (transforming function according to table 1, see Fig 1 and col. 9 lines 34-47), first updating means, and second updating means (Fig 1, col. 5 lines 1-5, i.e. first update mean, publish event, on workflow and second update mean, write database). Rosenthal et al. further disclose a processor, col. 3 lines 10-15, corresponds to a processing means.

Concerning claim 8, see the discussion in claim 7 above. All the limitations of claim 8 are of the same scope as the limitations of claim 2, and are therefore rejected on the same basis, with following noted exceptions. Claim 8 recites a determining mean and a resolving means in the first updating mean. Rosenthal et al. disclose a supplemental routine module able to act as determining mean and resolving mean. Supplemental routine module able to determine request type (col. 9 lines 24-46 i.e. SA or SH) and resolve request type (Table 1, resolve by matching mode indicator to proper scenario).

With respect to claim 9, see the discussion in claim 8 above. All the limitations of claim 9 are of the same scope as the limitations of claim 3, and are therefore rejected on the same basis, with following noted exceptions. Claim 9 recites a matching mean, a substitution mean in the resolving meaning. Rosenthal et al. disclose a supplemental routine module able to act as matching mean and substitution mean. Supplemental routine module able match request type (table 1, match mode indicator, SA or SH to scenario or event) and substitute data request type (Col. 9 line 60- col. 10 line 11 substitute scenario for corresponding mode indicator).

As to claim 11, see the discussion in claim 10. All the limitations of claim 11 are of the same scope as the limitations of claim 5, and are therefore rejected on the same basis, with following noted exceptions. Claim 11 recites a workflow engine within a processing mean. Fig 1 of Rosenthal et al. show workflow engine within a processing server, or processing mean.

As to claim 12, see the discussion in claim 11. All the limitations of claim 12 are of the same scope as the limitations of claim 6, and are therefore rejected on the same basis, with following noted exceptions. Claim 12 recites a sending mean, a matching mean, and a synchronize mean. Fig 1 of Rosenthal et al. shows a supplement routine module act as sending mean, send data to database, as matching mean, match scenario in table 1 and table 2, and as a synchronize mean, synchronize requested change with database to update current employee position (Col. 13 lines 10-23 i.e. synchronize approved status with database).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenthal et al. in view of Ims et al.

With respect to claim 4, see the discussion in claim 3. Rosenthal et al. disclose the claim substantially including wherein the step of resolving further comprises

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traversing a search hierarchy including workflow request and a defaults objects (Figure 2, where search hierarchy is traversed according to logic test; search hierarchy includes workflow request (71-81), display all possible attribute for position, and default objects, 101 job code for the opening job position).

However, Rosenthal et al. do not explicitly disclose search hierarchy includes device model. Ims et al. disclose: search hierarchy with device model (Fig 9, i.e. service unit). This known function is applicable to the search hierarchy disclosed in Rosenthal et al. as they both share characteristics and capabilities, namely, all the functions are traversable by workflow engine.

One of ordinary skill in the art would have recognized that applying the known technique of Ims et al. would have yielded predictable results and resulted in an improved system. It would have been recognized that applying the function of Ims et al. to the teachings of Rosenthal et al. would have yield predictable results because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such data processing feature into similar system. Further, applying device model function to search hierarchy disclosed in Rosenthal et al. would have been recognized by those of ordinary skill in the art as resulting in an improved system that would allow confirmation of device prior to workflow execution.

Regarding claim 10, see the discussion in claim 9. All the limitations of claim 10 are of the same scope as the limitations of claim 4, and are therefore rejected on the same basis, with following noted exceptions. Claim 10 recites a resolving mean further

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comprise means for traversing a search hierarchy. Rosenthal et al. disclose a supplemental routine module able to traverse a search hierarchy in Fig 8.

Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenthal et al. in view of Ims et al. and further in view of Danneels et al.

As to claim 13, see the discussion on claim 1 above. Rosenthal et al. do not explicitly teach a computer program product having a computer readable medium for performing method steps of claim 1, although it is strongly suggested in col. 3 lines 32-47 of Rosenthal et al. Danneels et al., teaches a computer-implemented method realized as one or more programs on a computer (see column 2, lines 40-46 of Danneels et al.) In addition, Danneels et al. teaches that the programs are storable on a computer-readable medium such as a floppy disk or a CD-ROM (see column 2, lines 46-49 of Danneels et al.). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the method discussed in claim 1. One of ordinary skill in the art would have been motivated to incorporate this feature for the purpose of distribution and installation and execution of the software on another computer (see column 7, lines 46-49 of Danneels et al.).

As to claim 14, see the discussion in claim 1 above. all the limitation of claim 14 are of same scope as claim 13 and are therefore rejected on the same basis. Signal bearing medium having a computer readable signal is equivalent to computer readable medium product discussed in claim 13; hence, same rejection applied.

Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenthal et al. in view of US patent 2002/0161859 to Willcox et al. ("Willcox).

As to claim 17, see the discussion in claim 1 above. Rosenthal does not explicitly disclose disabling monitoring device prior to processing update request and enabling said monitoring device after update workflow request. However, Willcox discloses:

Prior to processing said workflow request, disabling an application scheduled to be updated by said updated workflow engine request (§ 87 i.e. existing system, updates require system to be shut down while the update take place).

Although Willcox and Rosenthal do not explicitly recite enable an application after updated workflow request, official notice is given that it is well know in the art at the time of the invention to enable an application after update is completed. Further, Rosenthal and Willcox do not explicitly recite a monitoring device being disabled then enabled during workflow update. However, monitoring device is representative of non-functional descriptive material as what type of device is not functionally related to the step of disable and enable step during workflow update process (MPEP 2106 II; *In re Gulack*, 217 USPQ 401 (Fed. Cir. 1983), *In re Ngai*, 70 USPQ2d (Fed. Cir. 2004), *In re Lowry*, 32 USPQ2d 1031 (Fed. Cir. 1994)) and therefore monitoring device do not impose patentable weight in claim 17.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Rosenthal with Willcox because claimed invention is merely a combination of old elements, and in the combination each element merely would have

performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As to claim 18, see the discussion in claim 7 above. All the limitations of claim 18 are of the same scope as claim 17, therefore rejected on the same basis with following noted exception. Claim 18 recites first updating mean capable to disable a device and second updating mean capable to enable a device. Rosenthal discloses first updating means, and second updating means (Fig 1, col. 5 lines 1-5, i.e. first update mean, publish event, on workflow and second update mean, write database) without specifying disable and enable function for first and second updating mean. However, Willcox discloses disabling an old rule then enabling a new rule is well known in the art (§ 87-88). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify first updating mean with disabling function and second updating mean with enabling function since claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

(10) Response to Argument

Appellants argue:

1. Rosenthal et al. ("Rosenthal") do not disclose "updating said workflow request with pre-process workflow data" as presently claimed in claims 1 and 7.

2. Rosenthal does not disclose “matching logical operations associated with said plurality of request types with corresponding said data objects identified in said data model” as presently claimed in claims 3 and 9.

3. Rosenthal does not disclose “substituting corresponding said data objects representative of said pre-process workflow data into said workflow request” as presently claimed in claims 3 and 9.

4. Rosenthal does not disclose “sending outcome data in notification of said workflow processed from said workflow engine to a post workflow interceptor” as presently claimed in claims 6 and 12.

5. Rosenthal does not disclose “updating of said data objects in said data model with said outcome data by said post-workflow interceptor to synchronize said data model with said plurality of resources of said computer system” as presently claimed in claims 6 and 12.

6. Rosenthal in view of Danneels do not disclose “updating said workflow request with pre-process workflow data” as presently claimed in claims 13 and 14.

7. Claims 7-12 is tied to a particular machine and provide transformation of an article.

Examiner does not find these arguments persuasive, and discusses each of the arguments in detail below:

1. Rosenthal does not disclose “updating said workflow request with pre-process workflow data” as presently claimed in claims 1 and 7.

Before discussing the prior art, examiner would like to point out the breath of the claim. Here, "updating a workflow request with pre-processed workflow data" is not equivalent to "updating a workflow request before processing it" as interpreted by the appellant. Notice that "pre-processed workflow data" is merely a non-functional descriptive label for the "data". It would be reasonable to interpret the limitation as "updating a workflow request with any data." Applicant's interpretation for this limitation is much narrower than the claimed language it self. The limitation only requires a workflow request to be updated with some data, and it's silent regarding to when the update should occur.

As for the prior art, examiner notes that Rosenthal discusses a computer program utilizing workflow engine to obtain approvals for proposed change in the database (summary). Here, approval workflow starts in figure 8, and data preparations (Figure 2 and 5A-5B) prior to "Submit" in figure 8 is updating workflow request. For instance, user can updates a workflow request with pre-processed workflow data such as employee number (col. 8 lines 5-10 and 40-45), or job code (col. 8 lines 51-65). After the workflow request is updated, user can further save or implement the updated workflow request as discussed in col. 8 line 66 - col. 9 line 5. Hence, examiner respectfully disagrees with appellant's argument.

2. Rosenthal does not disclose "matching logical operations associated with said plurality of request types with corresponding said data objects identified in said data model" as presently claimed in claims 3 and 9.

Here, SA and SH mode is used by Rosenthal to show whether or not a proposed change is ready for implementation (col. 9 lines 35-47, Rosenthal discusses that SH mode is status from pre-workflow process in figure 5, and SA is ready status from pre-workflow process in figure 2). Examiner disagrees with appellant that SA and SH indicators are not logical operations, note that logical operations in a workflow scheme can simple be a yes-or-no operation. For instance, it is old and well known for a programmer to implement a bypass node with if-or-else command. Here it is clear that SA and SH serve as logical operations to indicate whether pre-processed workflow request is ready for submit. Further, Rosenthal teaches matching SA or SH logical operations to a plurality of request type with corresponding said data objects identified in said data model in table 1. Notice that in table 1, there are three mode indicators SA, SH and OA, each of them are linked to a different request type such as SH linked to submitted transfer as shown in row 3. Request of transfer is clearly linked to data objects identified in said data model such as current job code and future job code (request type and related data is discussed in col. 3 line 64 - col. 4 line 15). Hence, examiner respectfully disagrees with appellant's argument.

3. Rosenthal does not disclose “substituting corresponding said data objects representative of said pre-process workflow data into said workflow request” as presently claimed in claims 3 and 9.

As discussed in the response to argument 2 above, said data objects representative of said pre-process workflow data are job position code and employee ID number. Rosenthal further discusses substituting said data objects into said workflow request in col. 5 lines 7-51 also in col. 6 lines 40-54. Here, examiner interprets substitution as replacing information. In col. 5 lines 7-30, Rosenthal teaches replacing data objects such as position attributes (i.e. figure 3 is a diagrammatic view of this position attribute screen which is new screen that replaces one of the preexisting screen). In col. 6 lines 40-54, Rosenthal further teaches replacing proposed job code with null data by cancelling the proposed change. Since applicant does not introduce further detail into this limitation, examiner believes that Rosenthal has fully anticipated this limitation as claimed under the broadest reasonable interpretation for the claim.

4. Rosenthal does not disclose “sending outcome data in notification of said workflow processed from said workflow engine to a post workflow interceptor” as presently claimed in claims 6 and 12.

Here, outputting result after a workflow process is not only old and well known, but almost inherent for all workflow operation. In figure 1, Rosenthal discussed overall network structure for communicating between the workflow engines and multiple client systems. In light of the broadest reasonable interpretation, sending outcome data in notification from said workflow engine to a post workflow interceptor can be merely sending out data from the workflow engine 43 to an electronic box of one manager (col. 4 lines 30-44). Further a post workflow interceptor can be understood as any application

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or system that receives result from a workflow process. Rosenthal further teaches that the workflow engine act as a workflow interceptor after approval step by multiple managers (col. 4 lines 30-52). Depends on how one of ordinary skill of art define where is the end of a workflow, the next application or node for receiving result would function as a post workflow interceptor. Therefore, Examiner believes that Rosenthal fully anticipated this limitation by showing multiple post workflow interceptors as discussed above.

5. Rosenthal does not disclose “updating of said data objects in said data model with said outcome data by said post-workflow interceptor to synchronize said data model with said plurality of resources of said computer system” as presently claimed in claims 6 and 12.

Updating data objects in said data model is same as updating employee ID with new job code in the database. As discussed above, a post workflow interceptor can be understood as any application or system that receives result from a workflow process. Here, Rosenthal clearly shows that the workflow engine act as a workflow interceptor after approval step by multiple managers (col. 4 lines 30-52). Further, this workflow interceptor automatically initiates an update to the database in order to implement the approval raise (col. 4 lines 40-45). It is clear that the workflow interceptor updates the data objects in said data model with said outcome data by said post-workflow interceptor after manager approval workflow i.e. update employ raise or job transition code in the database or data model 36. Further, data model is all updated and

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synchronized in the database 36 with plurality of resources of said computer system i.e. database update would synchronizes all information request from client systems, personnel administration system and personnel development system as shown in figure 1. Hence, examiner respectfully disagrees with appellant's argument.

6. Rosenthal in view of Danneels do not disclose “updating said workflow request with pre-process workflow data” as presently claimed in claims 13 and 14.

See the response for argument 1 above. Examiner notes that Rosenthal discusses a computer program utilizing workflow engine to obtain approvals for proposed change in the database (summary). Here, approval workflow starts in figure 8, and data preparations (Figure 2 and 5A-5B) prior to “Submit” in figure 8 could reasonably be understood as updating workflow request. For instance, user can updates a workflow request with pre-processed workflow data such as employee number (col. 8 lines 5-10 and 40-45), or job code (col. 8 lines 51-65). After the workflow request is updated, user can further save or implement the updated workflow request as discussed in col. 8 line 66 - col. 9 line 5.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Rosenthal with Danneels since the claimed invention is merely a combination of old elements i.e. store computer instructions in a computer readable medium, and in the combination each element merely would have performed the same

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function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

7. Claims 7-12 is tied to a particular machine and provide transformation of an article.

In response to appellant's argument, examiner would like to point out that the claim language in claim 7 does not invoke 35 U.S.C. 112 6th paragraph. Claim 7 recites means to update, means to transform, means to process instead of "means for" language as required by 35 U.S.C. 112 6th paragraph. Appellant discusses both hardware system and software operation system in the specification; in paragraph 19-20 appellant discusses the hardware system and in paragraph 21, appellant discusses the software operating system.

Appellant's argument for structural support such as memory and processor are not recited in claim 7. Since the claim does not invoke 35 U.S.C. 112 6th paragraph, examiner is required to give the broadest reasonable interpretation base on the current claim language. Therefore, all the means as recited in claim 7 can be reasonably understood as software per se discussed in paragraph 21. Since the software program as recited by the appellant is not one of the following statutory class:

a process, machine, manufacture, or composition of matter, or any new and useful improvement,

examiner believes that appellant's invention as currently claimed is non-statutory.

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(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/TZU-HSIANG (SEAN) LAN/

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